

Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A cosmetic composition, ~~containing, in a physiologically acceptable medium, comprising~~ at least one rod-coil type block copolymer comprising at least one "coil" polymeric block structure of variable conformation bonded to at least one "rod" block structure of restricted conformation, wherein:

the at least one rod-coil type block copolymer is provided in a physiologically acceptable medium; and

, ~~the composition being characterized in that said the~~ rod block structure is of polymeric nature and is constituted in full or in part of peptide motifs ~~or the like~~ with some or all of the free hydrogen atoms of ~~said the~~ peptide motifs participating in non-covalent hydrogen bonds within the rod structure.

2. (Currently Amended) ~~A~~ The composition according to claim 1, ~~characterized in that wherein~~ the non-covalent hydrogen bonds within the rod structure are present in sufficient number and/or are strategically placed as to ensure that ~~said the~~ rod polymeric structure has a mean distance between the ends of its chain $\langle R_0^2 \rangle$ satisfying the convention:

$$\langle R_0^2 \rangle_{\text{rod}} = CNL^2$$

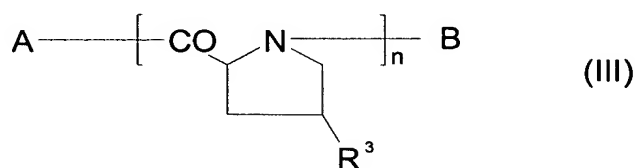
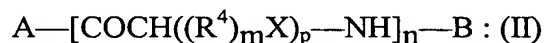
where:

L represents ~~the a~~ length of a monomer;

C represents ~~the~~ restrictions imposed on the chain ~~with C~~ and is greater than 1 ~~and in particular lying in the range 4 to 10;~~ and

N represents ~~the a~~ number of monomers constituting the block.

3. (Currently Amended) ~~The A-composition according to claim 1 or claim 2,~~
~~characterized in that wherein~~ the rod polymeric block structure satisfies ~~in full or in part~~
 general formula (II) or (III), or is a derivative thereof:



in which:

n represents an integer not less than 3;

m represents an integer ~~lying in the range from~~ 0 to 30;

p represents an integer ~~lying in the range from~~ 0 to 1:

X represents:

OR¹;

NR¹R²;

COOR¹;

NH-C(NH)NR¹R²;

an optionally condensed heterocycle ~~possibly optionally~~ including 1 to
 2 nitrogen atoms and being unsaturated;

SR¹;

OCOR¹;

OCONR¹R²;

OCOOR¹;

CONR¹R²;

NR^1COR^2 ;

$\text{NR}^1\text{COO R}^2$;

$\text{PO}(\text{OR}^1)_2$;

SSR^1 ;

SCOR^1 ;

SCOOR^1 ; or

SO_3H ;

R^1 , R^2 , and R^3 represent independently of one another:

a hydrogen atom;

a linear ~~alkyl~~, branched or cyclic alkyl grouping, in particular in the range C_1 to C_{12} , more particularly C_2 to C_8 , branched, where appropriate cyclic; or

an aromatic grouping, in particular aryl, aralkyl, alkylaryl, or diaryl, in the range C_1 to C_{30} , e.g. of the benzyl type;

R^4 represents a divalent linear, branched or cyclic -alkylene grouping in particular in the range C_1 to C_{12} , more particularly C_2 to C_8 , that is branched, possibly cyclic, or an aromatic grouping, in particular arylene, aralkylene, or alkylarylene, or diarylene in the range C_1 to C_{30} , e.g. of the benzylene typegroup;

————— R^4 , m, and X possibly having respective different meanings within the general formula (II);

A represents a hydroxyl or derived function, represents the bond established with a coil block structure, or represents a function capable of initiating peptide polymerization; and

B represents a hydrogen atom or represents the bond established with a coil block structure; ~~and~~

~~derivatives thereof.~~

4. (Currently Amended) The A-composition according to claim 3, characterized in that said wherein the rod-coil block polymer satisfies formula (II) in which:

m represents an integer ~~in the range from~~ 0 to 12;

X represents a ~~grouping group~~ selected from -OR¹, -NR¹R², -COOR¹, -NR¹COR², -CONR¹R², -NR¹COOR², or -SR¹; and

~~with R¹ and R² representing~~ represent independently of each other a hydrogen atom, a methyl, ethyl, propyl, butyl, isobutyl, isopropyl, phenyl, benzyl, trifluoromethyl, -(CH₂)₂OH or -(CH₂)₃OH group.

5. (Currently Amended) The A-composition according to ~~any one of claims 1 to 4~~ claim 1, characterized in that wherein the rod block structure is derived from homopolymerization or copolymerization of one or more amino acids selected from the group consisting in of glycine, alanine, phenylalanine, valine, isoleucine, leucine, arginine, asparagine, aspartic acid, cysteine, methionine, glutamine, glutamic acid, histidine, lysine, serine, threonine, tryptophane, tyrosine, proline, and derivatives thereof.

6. (Currently Amended) The A-composition according to ~~any one of claims 1 to 5~~ claim 1, characterized in that wherein the rod-block structure is ~~or is derived from~~ selected from the group consisting of:

poly(L-leucine), poly(L-valine), poly(phenylalanine);

poly(L-lysine) ~~and derivatives thereof, such as poly(N-benzylloxycarbonyl-L-lysine) and poly(N-trifluoroacetyl-L-lysine), and derivatives thereof such as hydrochlorides;~~

poly(L-glutamic acid) and salts thereof ~~such as the sodium salt, and derivatives thereof, such as poly γ -alkylesters in the range C₁-C₃₀ of L-glutamic acid such as poly(γ -methyl L-glutamate) or poly γ -aryl esters in the range C₁-C₃₀ or poly γ -alkyl aryl esters in the range C₁-C₃₀ such as poly(γ -benzyl L-glutamate);~~

~~polyglutamine and derivatives thereof, such as poly(N-hydroxyethyl L-glutamine and poly(N-hydroxypropyl L-glutamine); and~~

polypeptide copolymers ~~of the above monomers of the~~ selected from the group consisting of poly(hydroxyethyl-L-glutamine and leucine), poly(hydroxyethyl-L-glutamine and valine), poly(γ -benzyl-L-glutamate and leucine), poly(γ -benzyl-L-glutamate and D,L-phenylalanine, poly(γ -benzyl-L-glutamate and cinnamylglutamate), poly(N-benzyloxycarbonyl-L-lysine and γ -benzyl-L-glutamate)-~~type~~, and salts and derivatives thereof; and

derivatives thereof.

7. (Currently Amended) The A-composition according to ~~any one of claims 1 to 6~~ claim 1, characterized in that wherein the a number average molecular mass of the rod blocks ~~lies in the range is from~~ 200 g/mol to 1,000,000 g/mol, ~~in particular 250 g/mol to 800,000 g/mol, and more particularly 250 g/mol to 500,000 g/mol.~~

8. (Currently Amended) The A-composition according to ~~any one of claims 1 to 7~~ claim 1, characterized in that wherein the rod blocks are present in an amount of at least 10%, in particular at least 15%, or at least 30%, and in particular at most 90%, or at most 85%, or at most 80% by weight relative to ~~the a~~ total weight of the copolymer.

9. (Currently Amended) The A-composition according to ~~any one of claims 1 to 8~~ claim 1, characterized in that wherein the a mean distance between the ends of a chain in the coil block, i.e. $\langle R_0^2 \rangle_{coil}$ satisfies the convention:

$$\langle R_0^2 \rangle_{\text{coil}} = NL^2$$

where N and L are as defined in claim 2 where:

L represents a length of a monomer; and

N represents a number of monomers constituting the block.

10. (Currently Amended) ~~The A-composition according to any one of claims 1 to 9~~claim 1, characterized in that wherein the coil block is made of one or more copolymers or homopolymers derived from radical polymerization of monomers comprising ethylene, vinyl, allyl, (meth)acrylate, and/or (meth)acrylamide motifs and derivatives thereof.

11. (Currently Amended) ~~The A-composition according to any one of claims 1 to 10~~claim 1, characterized in that wherein the coil polymer is selected from the group consisting of:

vinyl and (meth)acrylate copolymers, vinyl and (meth)acrylamide copolymers, vinyl and (meth)acrylate and (meth)acrylamide copolymers, olefin and vinyl copolymers, and (meth)acrylate and (meth)acrylamide copolymers, and ~~also~~ (meth)acrylate and (meth)acrylate copolymers.

homopolymers or copolymers based on at least one of vinyl acetate, styrene, vinylpyrrolidone, vinylcaprolactam, ethylene polyoxide (meth)acrylate, stearyl (meth)acrylate, lauryl (meth)acrylate, vinyl laurate, butyl (meth)acrylate, ethylhexyl (meth)acrylate, crotonic acid, (meth)acrylic acid, maleic anhydride, sulfonic styrene acid, dimethyldiallylamine, vinylpyridine, dimethylaminoethyl (meth)acrylate, and dimethylaminopropyl (meth)acrylamide, ~~and salts thereof;~~

polycondensates of at least one of polyurethane, ~~and/or~~ polyureas, aliphatic polyesters, aliphatic polyamides, ~~and copolymers thereof;~~

~~polycondensates of polyurethane and/or polyureas, of aliphatic polyesters, of aliphatic polyamides or of their copolymers, such as for example polycondensates of poly(urethane/urea) and poly(ester/amide);~~

polymers obtained by cycle opening, selected from the group consisting of polyethers of the ethylene polyoxide type, propylene polyoxide and copolymers thereof, polylactides, polyesters ~~such as polycaprolactone;~~ and polyoxazolines ~~such as poly(2-methyloxazoline), or poly(2-ethyloxazoline);~~

homopolymers of siloxane, ~~such as polydimethylsiloxane (PDMS), polymethylphenylsiloxane, and polymethylaurylsiloxane;~~

polymers obtained by metathesis ~~such as poly(norbornene) and copolymers thereof;~~

polymers obtained by cationic polymerization ~~such as polyvinylalkylethers e.g. polyvinylmethylethers; and~~

~~copolymers of different types of the above polymers;~~

~~copolymers of different types of the above polymers with other polymers, such as for example polysiloxanes and ethylene polyoxide copolymers; and~~

copolymers, salts and derivatives thereof.

12. (Currently Amended) The A-composition according to any one of claims 1 to 11 ~~claim 1, characterized in that wherein the a~~ number average molecular mass of the coil block ~~lies in the range is from 300 g/mol to 1,000,000 g/mol, in particular 500 g/mol to 800,000 g/mol, and more particularly 500 g/mol to 500,000 g/mol.~~

13. (Currently Amended) The A-composition according to any one of claims 1 to 12 ~~claim 1, characterized in that wherein its an~~ overall number average molecular mass of the rod-coil copolymer lies in the range is from 700 g/mol to 1,000,000 g/mol, ~~in particular 1,000 g/mol to 800,000 g/mol, and more particularly 2,000 g/mol to 500,000 g/mol.~~

14. (Currently Amended) ~~The A-composition according to any one of claims 1 to 13~~claim 1, e~~h~~aracterized in that said ~~wherein the~~ rod-coil block copolymer is not cross-linked.

15. (Currently Amended) ~~The A-composition according to any one of claims 1 to 14~~claim 1, e~~h~~aracterized in that said ~~wherein the~~ rod-coil copolymer is selected from the group e~~omprising~~consisting of:

~~_____rod-block-coil (also abbreviated as rod-b-coil)-di-blocks, such as for example ethylene polyoxide-b-poly(gamma-benzyl L-glutamate), poly(N-benzyloxycarbonyl-L-lysine)-b-ethylene polyoxide, ethylene polyoxide-b-poly(gamma-L-glutamic acid), poly(L-lactide)-b-poly(gamma-benzyl L-glutamate), ethylene polyoxide-b-poly(gamma-benzyl L-glutamate), poly(gamma-benzyl lysine)-b-polystyrene, polydimethylsiloxane-b-poly(L-glutamic acid), acrylic polyacid-b-poly(L-glutamic acid), sulfonic polyester-b-poly(L-glutamic acid), poly(gamma-methyl L-glutamate)-b-polyurethane, polyethylene imine-b-poly(L-phenylalanine), polymethyloxazoline-b-poly(L-phenylalanine), polycaprolactone-b-poly(L-alanine), polycaprolactone-b-polyglycine, polybutadiene-b-poly(L-glutamic acid), polydimethylsiloxane-b-poly(benzyl-glutamate), poly(N-benzyloxycarbonyl-L-lysine)-b-poly(ethylene oxide-co-propylene oxide), poly(ethylene oxide-co-propylene oxide)-b-poly-gamma-L-glutamic acid, poly(ethylene oxide-co-propylene oxide)-b-poly(gamma-benzyl L-glutamate), and salts thereof;~~
~~_____coil-block-rod-block-coils, or rod-b-coil-b-rod tri-blocks such as for example poly(gamma-benzyl L-glutamate)-b-polystyrene-b-poly(gamma-benzyl L-glutamate), poly(L-glutamic acid)-b-polybutadiene-b-poly(L-glutamic acid), poly(L-glutamic acid)-b-polydimethylsiloxane-b-poly(L-glutamic acid), poly(gamma-benzyl L-glutamate)-b-poly(ethylene oxide-or-co-propylene oxide)-b-poly(gamma-benzyl L-glutamate), poly(benzyl-glutamate)-b-polydimethylsiloxane-b-poly(benzyl-glutamate), poly(L-glutamic acid)-b-acrylic polyacid-b-poly(L-glutamic acid), poly(L-glutamic acid)~~

~~b-sulfonic polyester b-poly(L-glutamic acid), poly(gamma-methyl-L-glutamate) b-polyurethane b-poly(gamma-methyl-L-glutamate; poly(L-phenylalanine) b-imine polyethylene b-poly(L-phenylalanine), poly(L-phenylalanine) b-polymethyloxazoline b-poly(L-phenylalanine), poly(L-alanine) b-polycaprolactone b-poly(L-alanine), polyglycine b-polycaprolactone b-polyglycine, poly(L-valine) b-poly(ethylene oxide co-propylene oxide) b-poly(L-valine), and salts thereof.~~

16. (Currently Amended) The A-composition according to any preceding claim~~claim 1~~, characterized in that wherein it composition contains the copolymer in an amount of from 0.5% by weight to 90% by weight, in particular 0.7% by weight to 85% by weight, and more particularly 0.8% by weight to 75% by weight of copolymer(s) relative to the a total weight of the composition.

17. (Currently Amended) The A-composition according to any preceding claim~~claim 1~~, characterized in that wherein it includes the composition comprises at least one aqueous phase.

18. (Currently Amended) The A-composition according to any preceding claim~~claim 1~~, characterized in that said wherein the composition includes comprises at least one fatty phase.

19. (Currently Amended) The A-composition according to any one of claims 1 to 16 and 18~~claim 1~~, characterized in that wherein it the composition is anhydrous.

20. (Currently Amended) The A-composition according to claim 18 or claim 19, characterized in that said wherein the fatty phase contains comprises at least one of at least one a fat that is liquid at ambient temperature and at atmospheric pressure, and/or and at least one a fat that is solid at ambient temperature and at atmospheric pressure.

21. (Currently Amended) The A-composition according to claim 20, characterized in that said wherein the fat that is liquid at ambient temperature and at atmospheric pressure comprises at least one volatile or non-volatile oil or a mixture thereof.

22. (Currently Amended) The A-composition according to claim 20 or claim 21, characterized in that said wherein the fat that is liquid at ambient temperature and at atmospheric pressure ~~represents~~ is present in an amount of from 0.01% to 90% by weight, ~~and in particular 0.1% to 85% by weight~~ relative to ~~the~~ a total weight of the fatty phase.

23. (Currently Amended) The A-composition according to ~~any one of claims 20 to 22~~ claim 20, characterized in that said wherein the fat that is solid at ambient temperature and at atmospheric pressure is selected from waxes, pasty fats, gums, and mixtures thereof.

24. (Currently Amended) The A-composition according to ~~any one of claims 18 to 23~~ claim 18, characterized in that said wherein the fatty phase ~~contains~~ comprises at least one solid fat ~~constituting in an amount of form~~ 0.01% to 50%, in particular 0.1% to 40%, and more particularly 0.2% to 30% by weight relative to ~~the~~ a total weight of the composition.

25. (Currently Amended) The A-composition according to ~~any preceding claim~~ claim 1, characterized in that said wherein the composition further comprises a particulate phase ~~constituting in an amount of~~ 0.01% to 40%, in particular 0.01% to 30%, and more particularly 0.05% to 20% by weight relative to ~~the~~ a total weight of ~~said the~~ composition.

26. (Currently Amended) The A-composition according to claim 25, characterized in that said wherein the particulate phase comprises at least one of an additional pigment, and/or nacre and/or ~~or~~ filler.

27. (Currently Amended) The A-composition according to ~~any one of claims 1 to 18 and 20 to 26~~ claim 1, characterized in that wherein it the composition is in the form of an oil-in-water or a water-in-oil emulsion.

28. (Currently Amended) ~~The A-composition according to any preceding~~
~~claim~~claim 1, ~~characterized in that wherein it the composition~~ is in the form of a product that
has been cast as a stick or a cake.

29. (Currently Amended) ~~The A-composition according to any preceding~~
~~claim~~claim 1, ~~characterized in that wherein it the composition~~ is in the form of a makeup
and/or a care product for the skin and/or the lips.

30. (Currently Amended) ~~The A-composition according to any one of claims 1 to~~
~~27~~claim 1, ~~characterized in that wherein it the composition~~ is in the form of a care product
and/or a makeup for the nails.

31. (Currently Amended) ~~The A-composition according to any one of claims 1 to~~
~~27~~claim 1, ~~characterized in that wherein it the composition~~ is in the form of a care product
and/or a styling composition for the hair.

32. (Currently Amended) A method of cosmetically treating a keratinous material,
comprising at least applying a ~~the~~ composition according to ~~any one of claims 1 to 31 on said~~
claim 1 to the material.

33. (Currently Amended) ~~The use of a copolymer as defined in any one of claims~~
~~1 to 15 as a~~A surface active agent, comprising at least one rod-coil type block copolymer
comprising at least one "coil" polymeric block structure of variable conformation bonded to at
least one "rod" block structure of restricted conformation, wherein the rod block structure is
of polymeric nature and is constituted in full or in part of peptide motifs with some or all of
the free hydrogen atoms of the peptide motifs participating in non-covalent hydrogen bonds
within the rod structure.

34. (Currently Amended) ~~The use of a copolymer as defined in any one of claims~~
~~1 to 15 as a~~A rheological agent, comprising at least one rod-coil type block copolymer
comprising at least one "coil" polymeric block structure of variable conformation bonded to at

least one "rod" block structure of restricted conformation, wherein the rod block structure is of polymeric nature and is constituted in full or in part of peptide motifs with some or all of the free hydrogen atoms of the peptide motifs participating in non-covalent hydrogen bonds within the rod structure.

35. (Currently Amended) A block copolymer of the rod-coil type comprising at least one "coil" polymeric block structure of variable conformation bonded to at least one "rod" block structure of restricted conformation, wherein:

_____ the copolymer being characterized in that said rod block structure is of polymeric nature and is constituted in full or in part by peptide motif(s) ~~or the like~~ with all or some of the free hydrogen atoms of ~~said the~~ peptide motifs participating in non-covalent hydrogen bonds within the rod structure, ~~and~~

_____ in that ~~said the~~ coil block is made up of:

_____ radical homo- or copolymers derived from radical polymerization of at least one ethylene monomer of at least one of the following types: butadiene, (meth)acrylic, (meth)acrylamide, allyl, vinyl alcohol ester, and vinyl ether;

_____ polycondensates of at least one of polyurethane, and/or polyureas, of aliphatic polyesters, of aliphatic polyamides, or copolymers thereof, such as, for example, polycondensates of poly(urethane/urea) and poly(ester/amide);

_____ polymers obtained by opening cycles selected from polyesters ~~such as polycaprolactone, and polyoxazolines such as poly(2-methyloxazoline), or poly(2-ethyloxazoline);~~

_____ homopolymers of siloxane, ~~such as for example polydimethylsiloxane (PDMS), and polymethylphenylsiloxane or polymethylaurylsiloxane;~~

_____ polymers obtained by metathesis ~~such as poly(norbornene) and copolymers thereof;~~

_____ copolymers comprising monomers obtained by cationic polymerization such as polyvinylalkylethers such as for example polyvinylmethylethers; and
 _____ copolymers of different types of the above polymers such as, for example poly(urethane-siloxane);
 _____ copolymers of different types of the above polymers with other copolymers such as, for example copolymers of polysiloxane and ethylene polyoxide; and
 _____ copolymers, salts and derivatives thereof.

36-37. (Canceled).

38. (Currently Amended) A copolymer, characterized in that it is selected from the group comprising: configured as

_____ a rod-block-coil di-blocks, such as poly(N-benzyloxycarbonyl L-lysine)-b-ethylene polyoxide, ethylene polyoxide-b-poly gamma L-glutamic acid, poly L-lactide-b-poly(gamma-benzyl L-glutamate), ethylene polyoxide-b-poly(gamma-benzyl L-glutamate), poly(gamma-benzyl lysine)-b-polystyrene, polydimethylsiloxane-b-poly(L-glutamic acid), acrylic polyacid-b-poly(L-glutamic acid), sulfonic polyester-b-poly(L-glutamic acid), poly(gamma-methyl L-glutamate)-b-polyurethane-polyethylene imine-b-poly(L-phenylalanine), polymethyloxazoline-b-poly(L-phenylalanine), polycaprolactone-b-poly(L-alanine), polycaprolactone-b-polyglycine, polybutadiene-b-poly(L-glutamic acid) polydimethylsiloxane-b-poly(benzyl glutamate), poly(N-benzyloxycarbonyl L-lysine)-b-poly(ethylene oxide-co-propylene oxide), poly(ethylene oxide-co-propylene oxide)-b-poly gamma L-glutamic acid, poly(ethylene oxide-co-propylene oxide)-b-poly(gamma-benzyl L-glutamate), and salts thereof;

_____ a coil-block-rod-block-coil tri-blocks, or a rod-b-coil-b-rod tri-blocks, such as poly(gamma-benzyl L-glutamate)-b-propylene polyoxide-b-poly(gamma-benzyl L-glutamate), poly(gamma-benzyl L-glutamate)-b-polystyrene-b-poly(gamma-benzyl L-

~~glutamate), poly(L-glutamic acid)-b-polybutadiene-b-poly(L-glutamic acid), poly(L-glutamic acid)-b-polydimethylsiloxane-b-poly(L-glutamic acid), poly(L-glutamic acid)-b-polydimethylsiloxane-b-poly(L-glutamic acid) poly(gamma-benzyl L-glutamate)-b-poly(ethylene oxide-co-propylene oxide)-b-poly(gamma-benzyl L-glutamate), poly(benzyl-glutamate)-b-polydimethylsiloxane-b-poly(benzyl-glutamate), poly(L-glutamic acid)-b-acrylic polyacid-b-poly(L-glutamic acid), poly(L-glutamic acid)-b-sulfonic polyester-b-poly(L-glutamic acid), poly(gamma-methyl L-glutamate)-b-polyurethane-b-poly(gamma-methyl L-glutamate), poly(L-phenylalanine)-b-polyethylene imine-b-poly(L-phenylalanine), poly(L-phenylalanine)-b-polymethyloxazoline-b-poly(L-phenylalanine), poly(L-alanine)-b-polycaprolactone-b-poly(L-alanine), polyglycine-b-polycaprolactone-b-polyglycine, poly(L-valine)-b-poly(ethylene oxide-co-propylene oxide)-b-poly(L-valine), and or a salts thereof.~~